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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,843

02/11/2004

Sung Duck Chun

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03/06/2008

LEE, HONG, DEGERMAN, KANG & SCHMADEKA

660 S. FIGUEROA STREET

Suite 2300

LOS ANGELES, CA 90017

EXAMINER

BEAMER, TEMICA M

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/777,843	Applicant(s) CHUN ET AL.	
	Examiner Temica M. Beamer	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 1-32 is withdrawn in view of the newly discovered reference(s) to the Universal Mobile Telecommunications System (UMTS) Radio Resource Control (RRC) protocol specification, 3GPP TS 25.331, version 3.10.0 Release 1999. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-22 and 27-31 are rejected under 35 U.S.C. 102(b) as being anticipated by the Universal Mobile Telecommunications System (UMTS) Radio Resource Control (RRC) protocol specification, 3GPP TS 25.331, version 3.10.0 Release 1999 (the UMTS spec.).

Regarding claim 1, the UMTS spec. discloses an apparatus for processing a security setup control message in a mobile communication system, the apparatus comprising: means for verifying the integrity of the message wherein the value of at least one security variable is updated with new security setup information if the

message is verified and the value of the security variable remains unchanged if the message is not verified (pages 93-94, 8.1.12.3.1 and page 95, 8.1.124a).

Regarding claim 2, the UMTS spec. discloses the apparatus of claim 1, further comprising means for storing the previous value of the security variable before it is updated with new security setup information as evidenced by the fact that the information is stored (pages 88-89, 8.1.12.2.2).

Regarding claim 3, the UMTS spec. discloses the apparatus of claim 2, wherein the means for storing the previous value of the security variable comprises a memory unit as evidenced by the fact that the information is stored (pages 88-89, 8.1.12.2.2, page 93, 8.1.12.3.1).

Regarding claim 5, the UMTS spec. discloses the apparatus of claim 1, wherein the means for verifying the integrity of the message inherently comprises a processor as evidenced by the fact the apparatus can process information (pages 93-94, 8.1.12.3.1 and page 95, 8.1.124a).

Regarding claim 6, the UMTS spec. discloses the apparatus of claim 1, wherein the means for verifying the integrity of the message inherently comprises software stored on recording media as evidenced by the fact that the information is stored (pages 88-89, 8.1.12.2.2).

Regarding claim 7, the UMTS spec discloses the apparatus of claim 1, wherein the new security setup information is extracted from the message (page 89, 8.1.12.3).

Regarding claim 8, the UMTS spec. discloses the apparatus of claim 1, wherein the apparatus is located in UE (page 87, 8.1.12, page 96, 8.1.12).

Regarding claim 9, the UMTS spec. discloses the apparatus of claim 1, wherein the apparatus is located in the UTRAN (page 87, 8.1.12, page 96, 8.1.12.5).

Regarding claim 10, the UMTS spec. discloses the apparatus of claim 1, wherein the means for verifying the integrity of the message is adapted to generate an authentication value related to the message (page 93, 8.1.12.3.1).

Regarding claim 11, the UMTS spec. discloses the apparatus of claim 10, wherein the means for verifying the integrity of the message comprises a standardized integrity check authentication generation algorithm (page 93, 8.1.12.3.1).

Regarding claim 12, the UMTS spec. discloses a method for processing a security setup control message in a mobile communication system, the method comprising the steps of: verifying the integrity of the message; and processing the message and updating the value of at least one security variable with new security setup information if the message is verified and discarding the message and leaving the value of the at least one security variable unchanged if the message is not verified (page 93, 8.1.12.3.1, page 95, 8.1.12.4a).

Regarding claim 13, the UMTS spec. discloses the method of claim 12, further comprising storing the previous value of the at least one security variable before it is updated with new security setup information (pages 88-89, 8.1.12.2.2).

Regarding claim 14, the UMTS spec. discloses the method of claim 12, further comprising extracting the new security setup information from the message (page 89, 8.1.12.3).

Regarding claim 15, the UMTS spec. discloses the method of claim 12, further comprising generating an expected authentication value related to the message (page 93, 8.1.12.3.1).

Regarding claim 16, the UMTS spec discloses the method of claim 15, further comprising performing a standardized integrity check authentication generation algorithm (page 93, 8.1.12.3.1).

Regarding claim 17, the UMTS spec. discloses the method of claim 15, further comprising comparing the expected authentication value to a received authentication code (page 93, 8.1.12.3).

Regarding claim 18, the UMTS spec. discloses the method of claim 17, wherein the message is processed if the received message authentication code is equal to the expected message authentication value and the message is discarded if the received message authentication code is not equal to the expected message authentication code (page 93, 8.1.12.3, page 95, 8.1.12.3.1).

Regarding claim 19, the UMTS spec. discloses the method of claim 12, wherein the message is an RRC (radio resource control) message (cover page).

Regarding claim 20, the UMTS spec. discloses the method of claim 12, wherein the message is a signaling message (page 87, 8.1.12.1, page 93, 8.1.12.3).

Regarding claim 21, the UMTS spec. discloses a mobile station (UE) for processing a security setup control message in a mobile communication system, the mobile station comprising an RF module; a power management module; an antenna; a battery; a keypad; a memory trait; a speaker; a microphone (as these components are

inherent to mobile phones) and a processing unit adapted to verify the integrity of the message wherein the value of at least one security variable is updated with new security setup information if the message is verified and the value of the at least one security variable remains unchanged if the message is not verified (pages 93-94, 8.1.12.3.1, page 95, 8.1.124a).

Regarding claim 22, the UMTS spec. discloses the mobile station of claim 21, wherein the memory unit is adapted to store the previous value of the at least one security variable before it is updated with new security setup information (pages 88-89, 8.1.12.2.2, page 95, 8.1.124a).

Regarding claim 27, the UMTS spec. discloses the mobile station of claim 21, wherein the processing unit comprises a microprocessor as evidenced by the fact the mobile station can process information (pages 93-94, 8.1.12.3.1 and page 95, 8.1.124a).

Regarding claim 28, the UMTS spec. discloses the mobile station of claim 21, wherein the processing unit comprises software stored on recording media as evidenced by the fact that the information is stored (pages 88-89, 8.1.12.2.2).

Regarding claim 29, the UMTS spec. discloses the mobile station of claim 21, wherein the new security setup information is extracted from the message (page 89, 8.1.12.3).

Regarding claim 30, the UMTS spec. discloses the mobile station of claim 21, wherein the processing unit is adapted to generate an authentication value related to the message (page 93, 8.1.12.3.1).

Regarding claim 31, the UMTS spec. discloses the mobile station of claim 30, wherein the processing unit comprises a standardized integrity check authentication generation algorithm (page 93, 8.1.12.3.1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 23-26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the UMTS spec. in view of well-known prior art.

Regarding claim 4, the UMTS spec. discloses the apparatus of claim 2 as described above. The UMTS spec., however, fails to disclose wherein the means for storing the previous value of the security variable comprises a shift register.

The examiner contends, however, that the use of shift registers for storing data is well-known in the art and the examiner takes official notice as such.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the UMTS spec. with the teachings of well-known prior art for the purpose of retaining information for later use/output.

Regarding claims 23-26 and 32, the UMTS spec. discloses the mobile station of claim 21 as described above. The UMTS spec., however, fails to disclose wherein the memory unit comprises a shift register, a flash memory, a ROM, an SRAM and a SIM.

The examiner contends, however, that these types of memory devices are well-known in the art and the examiner takes official notice as such.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the UMTS spec., with the above mentioned memory devices for the purpose of retaining information for later use/output.

Conclusion

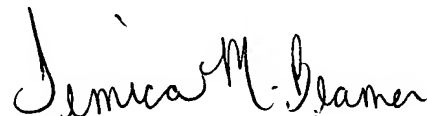
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Beamer whose telephone number is (571) 272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Temica M. Beamer
Primary Examiner
Art Unit 2617

tmb

A handwritten signature in black ink, reading "Temica M. Beamer". The signature is fluid and cursive, with the first name being the most prominent.

TEMICA BEAMER
PRIMARY EXAMINER